

Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the present application. Please amend claims 1, 4-8, 11, and 17 as follows:

Listing of the Claims:

1. (currently amended) A method for presenting data and functions to a user via a presentation layer, for use in a distributed processing system to effect an interface between a business layer and the presentation layer, the method comprising the steps of:

defining a data set-structure which implements ~~a Java-like~~ an abstract interface for use in both the business layer and the presentation layer, said data set structure comprising hierarchical organizational information for arranging one of data and functions into at least one tree structure, the true structure being navigable without regard to the type of data or function being processed;

populating a business layer data set in said business layer according to said data set structure, said business layer data set comprising data and functions available for use in said business layer; and

populating a presentation layer data set in said presentation layer according to said data set structure from said business layer data set, said presentation layer data set comprising data and functions available for use by the user in said presentation layer.

2. (original) A method in accordance with claim 1 wherein defining a data set-structure comprises defining a plurality of items comprising a plurality of data items and a plurality of function items.

3. (original) A method in accordance with claim 2 wherein defining a plurality of data items comprises defining a data value for each of said plurality of data items.

4. (currently amended)) A method in accordance with claim 2 wherein defining a plurality of data items comprises defining a domain for each of said plurality of data items, the domain corresponding to the data type of a data item.

5. (currently amended)) A method in accordance with claim 4 wherein defining a domain for each of said data items comprises defining a domain home for each of said plurality of data items, the domain home being a means of locating a domain.

6. (currently amended)) A method in accordance with claim 4 wherein defining a domain for each of said data items comprises defining a context for each of said plurality of data items, the context providing means of distinguishing between otherwise identical domains.

7. (currently amended) A method in accordance with claim 4 wherein defining a domain for each of said data items comprises defining a range domain for each of said plurality of data items, the range domain corresponding to those domains that have a continuous range of values, bound by an upper and lower limit.

8. (currently amended)) A method in accordance with claim 4 wherein defining a domain for each of said plurality of data items comprises defining a discrete domain for each of said plurality of data items, the discrete domain corresponding to those domains that have an explicit list of permitted values.

9. (original) A method in accordance with claim 2 wherein defining a plurality of function items comprises defining a function for each of said plurality of function items.

10. (original) A method in accordance with claim 2 wherein defining a plurality of function items comprises defining a function set for each of said plurality of function items.

11. (currently amended) An apparatus for use in a distributed data processing system comprising:

a data set which implements ~~a Java-like~~ an abstract interface for storing available data and identification of function calls, one of said data and function calls being arranged in at least one tree structure, the tree structure being navigable without regard to the type of data or function call being processed;

a presentation layer configured to store data and identification of function calls that are available for use by a user in accordance with said data set; and

a business layer configured to store data and identification of function calls that are available for use by said presentation layer in accordance with said data set.

12. (original) An apparatus in accordance with claim 11 wherein said presentation layer is further configured to request data and identification of function calls from said business layer and to store said data and identification of function calls in accordance with said data set so that data and identification of function calls of said business layer can be available to said presentation layer.

13. (original) An apparatus in accordance with claim 12 wherein said business layer comprises a plurality of processors wherein each of said processors is configured to store data and identification of function calls that are available for use by said presentation layer in accordance with said data set wherein each of said processors provides unique data and identification of function calls to said presentation layer.

14. (original) An apparatus in accordance with claim 13 wherein business layer function calls are available to said presentation layer for execution at said presentation layer via said data set.

15. (original) An apparatus in accordance with claim 13 wherein business layer function calls are available to said presentation layer for execution at said business layer via said data set.

16. (original) An apparatus in accordance with claim 13 wherein business layer function calls are available at said presentation layer for execution at both said presentation layer and at said business layer via said data set.

17. (currently amended) A method for presenting data and functions to a user via a presentation layer, for use in a distributed processing system to effect an interface between a business layer and the presentation layer, the method comprising the steps of:

defining a data set-structure which implements ~~a Java~~ an abstract interface for use in both the business layer and the presentation layer, said data set structure comprising hierarchical organizational information for arranging on of data and functions into at least one tree structure, the true structures being navigable without regard to the type of data or function being processed,

and which defines a plurality of data items and a plurality of function items, wherein each of said plurality of data items defines a data value, a range domain, and a context, the range domain having a domain home, and wherein each of said plurality of function items defines at least one function;

populating a business layer data set in said business layer according to said data set structure, said business layer data set comprising data and functions available for use in said business layer; and

populating a presentation layer data set in said presentation layer according to said data set structure from said business layer data set, said presentation layer data set comprising data and functions available for use by the user in said presentation layer.